

## AMENDMENT TO THE CLAIMS

The following listing of claims will replace all previous listings:

### Listing of Claims

1-40. (Cancelled)

41. (Previously presented) A method of determining dosage fill level in a test strip for performing a measurement on a biological fluid comprising:

providing a biological fluid test strip, comprising:

a capillary fill chamber extending a length along the test strip from an opening to a terminus, and

at least two pairs of dose sufficiency electrodes in operative communication with the chamber, each of the pairs of dose sufficiency electrodes positioned to define a respective gap between one another;

dosing the test strip with a biological fluid effective to cause the biological fluid to begin to fill the chamber;

applying a test signal to at least one electrode of each of the dose sufficiency electrode pairs;

measuring a respective response to the test signal at each of the dose sufficiency electrode pairs;

determining the dosage fill level based upon the responses.

42. (Original) The method of claim 41, wherein the test signal is an AC signal.

43. (Original) The method of claim 41, wherein the response comprises magnitude and phase angle information.

44. (Original) The method of claim 41, wherein the response comprises an admittance value.

45. (Previously presented) A method of determining a fill level of a biological fluid in a test strip for performing a measurement on the fluid comprising:

providing a test strip, comprising:

a fluid flow intake opening;

a fluid flow terminus;

at least two measurement electrodes disposed on the test strip between the opening to the terminus; and

at least two pairs of dose sufficiency electrodes positioned between the measurement electrodes and the terminus, each of the pairs of dose sufficiency electrodes defining a respective gap between one another;

introducing the biological fluid to the opening effective to cause the fluid to flow toward the terminus;

applying a test signal to at least one electrode of each of the dose sufficiency electrode pairs;

and

measuring a respective response to the test signal at each of the dose sufficiency electrode pairs;

determining the fill level of the biological fluid based upon the responses.

46. (Original) The method of claim 45, wherein the test signal is an AC signal.

47. (Original) The method of claim 45, wherein the response comprises magnitude and phase angle information.

48. (Original) The method of claim 45, wherein the response comprises an admittance value.

49. (Previously presented) A method of determining dosage fill rate in a biological fluid test strip comprising:

providing a biological fluid test strip, comprising:

a capillary fill chamber extending a length along the test strip from an opening to

a terminus,

and at least two dose sufficiency electrodes in operative communication with the

chamber, the dose sufficiency electrodes positioned to define a gap between one

another;

dosing the test strip with a biological fluid effective to cause the biological fluid to begin to fill the chamber;

applying a test signal having an AC component to at least one of the dose sufficiency electrodes;

measuring a first response to the test signal at a first time;

measuring a second response to the test signal at a second time; and

determining a rate at which the biological fluid fills the chamber based at least in part upon the first response and the second response.

50. (Original) The method of claim 49, wherein the test signal is an AC signal.

51. (Previously presented) The method of claim 49, wherein the first and second responses comprise magnitude and phase angle information.

52. (Previously presented) The method of claim 49, wherein the first and second responses comprise an admittance value.

53. (Original) The method of claim 49 further comprising recording the first response and the second response.

54. (Previously presented) A method of determining dosage fill rate in a biological fluid test strip comprising:

providing a biological fluid test strip, comprising:

a fluid flow intake opening;

a fluid flow terminus;

a measurement zone positioned between the opening and the terminus,

and at least two dose sufficiency electrodes positioned between the measurement zone and the terminus, the dose sufficiency electrodes positioned to define a gap between one another;

dosing the test strip with a biological fluid effective to cause the biological fluid to begin to flow from the opening toward the terminus;

applying a test signal having an AC component to at least one of the dose sufficiency electrodes;

measuring a first response to the test signal at a first time;

measuring a second response to the test signal at a second time; and

determining a rate at which the biological fluid fills the chamber based at least in part upon the first response and the second response.

55. (Original) The method of claim 54, further comprising:

a capillary fill chamber extending a length along the test strip from the opening to the terminus.

56. (Original) The method of claim 55, wherein the test signal is an AC signal.

57. (Previously presented) The method of claim 55, wherein the first and second responses comprise magnitude and phase angle information.

58. (Previously presented) The method of claim 55, wherein the first and second responses comprise an admittance value.

59. (Original) The method of claim 55 further comprising recording the first response and the second response.

60-65. (Cancelled)